**Installation Manual for the E-Commerce Platform**

***Written by: Alexander Escott and Francisco Castillo***

**Welcome to the installation guide for the E-Commerce Platform project for Group 14. This guide will help you set up the project on your local machine. Follow the steps carefully to ensure everything is set up correctly. Code will be provided throughout to help assist you in creating this project.**

**Step 1: Set Up the Development Environment**

**Install Java Development Kit (JDK):**

**Download and install JDK from the Oracle website.**

**Install PostgreSQL:**

**Download and install PostgreSQL from the PostgreSQL website.**

**\*\* Note down the PostgreSQL username and password you have chosen.**

**Set Up an IDE:**

**Choose a preferred Java IDE such as IntelliJ IDEA, Eclipse, or VS Code.( for this code we used Visual Code studios and IDEA**

**Install and configure the chosen IDE.**

**Step 2: Project Structure**

**Create Project Directory:**

**Open terminal and Create a new directory for your project.**

**Set Up Project Structure:**

**Create the following directories and package structure:**

**JavaLecture2024Sprint/lib/jbcrypt-0.4.jar**

**Postgresql-42.5.4.jar**

**JavaLecture2024Sprint/resources/ecommerce.sql**

**JavaLecture2024Sprint/Src/Admin.java**

**Buyer.java**

**Seller.java**

**DBUtil.java**

**MainMenu.java**

**Product.java**

**ProductDAO.java**

**ProductService.java**

**User.java**

**UserDAO.java**

**UserService.java**

**JavaLecture2024Sprint/Main.java**

**Step 3: Configure Database**

**To create a database open pgAdmin and create a new database named ecommerce.**

**Step 4: Create Database table**

**For your next step you must execute the following commands to create the needed table for the ecommerce database.**

CREATE TABLE users (

id SERIAL PRIMARY KEY,

username VARCHAR(100) UNIQUE NOT NULL,

password VARCHAR(255) NOT NULL,

email VARCHAR(100) UNIQUE NOT NULL,

role VARCHAR(20) NOT NULL

);

CREATE TABLE productss (

id SERIAL PRIMARY KEY,

name VARCHAR(100) NOT NULL,

price NUMERIC(10, 2) NOT NULL,

quantity INT NOT NULL,

seller\_id INT NOT NULL REFERENCES users(id)

);

**To check if all is properly setup open the psql interface and use the following. replace the yourusername with your actual username.**

**psql -U yourusername -d ecommerce**

**Step 5: Create model classes**

**Create the following model:**

**User.java**

**Buyer.java**

**Seller.java**

**Admin.java**

**Product.java**

**User.java**

**after these files are created import this code to each of their respective files:**

**Step 6: Create DAO classes**

**Create the following files in dao:**

**UserDAO.java**

**ProductDAO.java**

**after these files are created import this code to each of their respective files:**

**Step 7: Create service classes**

**Create the following files in service:**

**UserService.java**

**ProductService.java**

**after these files are created import this code to each of their respective files:**

**Step 8: Create jar files**

**Create a folder lib and add the files jar.**

**Jbcrypt-0.4.jar**

**Postgresql-42.5.4.jar**

**Step 9: Use the Application**

**Register a User:**

**Select "Register" from the menu.**

**Enter the required details (username, password, email, role).**

**Log In:**

**Select "Login" from the menu.**

**Enter your username and password.**

**Step 10: Role-Based Menus:**

**After logging in, you will see a menu based on your role:**

**you can try out each one of these to test it out yourself if you like.**

* **Buyer: Browse, search and view products.**
* **Seller: Add, update, delete, and view your products.**
* **Admin: View all users, delete users and view all products.**

**Thank you for reviewing our manual we hope you enjoyed it and below our credits for our team's contribution.**

**Team Contributions for sprint**

**1. Alexander Escott's contribution: Organizing Trello board to help with assigning project parts between our group members fairly. Wrote all files for subjects of role based functionality, User registration and authentication and Product management. Also designed the manual look and wrote all the steps.**

**2. Francisco Castillo's contribution: Wrote all files having to do with user interface and database intergration. He also imported the necessary code for each step in the manual as well as recorded the video as well as ran the project in the video.**

**Challenges Faced During project**

**Setting up the PostgreSQL database and ensuring correct configurations.**

**Implementing secure password storage using Bcrypt.**

**Coordinating tasks and integrating code contributions from different team members.**